

# Supporting the Instant License Model with ODRL

Renato Iannella  
Principal Scientist  
<renato@nicta.com.au>

## Overview



- Rights License Models
- ODRL
- Creative Commons
- AEShareNet
- Case Studies
- Mapping Semantics
- Summary

# Rights Flexibility



- Business
  - Unlimited business models
  - Interface to eComm
- Legal
  - Con
- Technical
  - Interoperable systems and services
  - Standards

<Rights Expression Language>

# License Models



- Evolved over time...
  - Bits
    - hardwired
  - Rights Expression Language
    - machine language
  - Instant License
    - fixed choice

# License Models



Type	Advantages	Disadvantages	Examples
Bits	<ul style="list-style-type: none"><li>• Simple structure</li><li>• Easy to implement</li></ul>	<ul style="list-style-type: none"><li>• Proprietary</li><li>• No extensibility</li><li>• Non Interoperable</li></ul>	<ul style="list-style-type: none"><li>• Windows Media DRM</li><li>• Apple FairPlay</li></ul>
REL	<ul style="list-style-type: none"><li>• Extensible languages</li><li>• Open standard</li><li>• Machine interpretable</li></ul>	<ul style="list-style-type: none"><li>• Complex implementation</li></ul>	<ul style="list-style-type: none"><li>• ODRL</li><li>• MPEG-21 REL</li></ul>
Instant License	<ul style="list-style-type: none"><li>• Simple fixed licenses</li></ul>	<ul style="list-style-type: none"><li>• No extensibility</li><li>• Non Interoperable</li></ul>	<ul style="list-style-type: none"><li>• Creative Commons</li><li>• AEShareNet</li></ul>

# License Models



- Can we have the best of “both worlds”?

**Instant Licenses based on  
RELs...**

# ODRL Initiative



- Open Digital Rights Language REL
  - Ad-hoc group
  - Independent Governance Board
- Specifications
  - Version 1.1 and 2.0 under development
  - Profile working groups
- Standards adoption
  - Formal Open Mobile Alliance (OMA) DRM spec
  - Published as W3C Note & Submitted to NISO



# ODRL Core Profile



Permissions		Constraints		Requirements	Rights Holder	Context
Display,	Backup	Individual	Spatial	Payment	Percentage	UID
Play	Restore	Group	DateTime	PrePay	Fixed Amount	Name
Print	Save	CPU	Accumulated	PostPay		Role
Execute	Install	Network	Interval	PerUse		Remark
Sell	Uninstall	Screen	Quality	Accept		Date
Lend	Modify	Storage	Format	Register		Physical Location
Lease	Excerpt	Memory	Unit	Attribution		Digital Location
Give	Annotate	Printer	WaterMark	Tracked		External Ref
Move	Aggregate	Software	Purpose			Service
Duplicate		Hardware	Industry			Version
Delete		Count	ReContext			Transaction
Verify		Range	Transfer			Event

# ODRL Mobile Profile



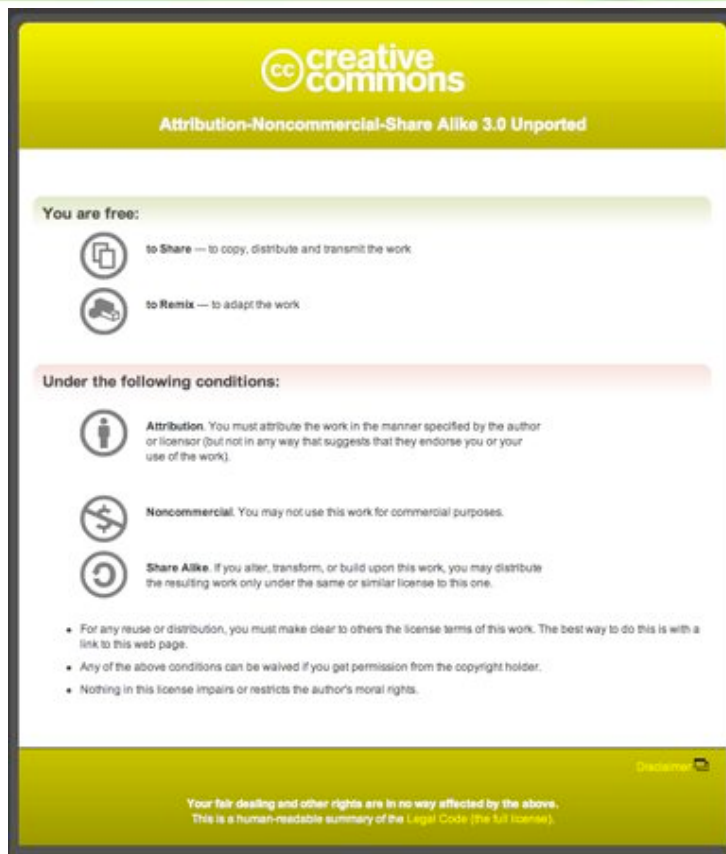
	Permissions	Constraints
OMA Version 1.0	Play	Count
	Display	Date time
	Execute	Interval
	Print	
OMA Version 2.0	Export	Accumulated
		Individual
		Timed-count
		System

# Creative Commons



- Instant Licenses aimed at sharing open content
- Attribution, Non-Commercial, No Derivatives
- Attribution, Non-Commercial, Share Alike
- Attribution, Non-Commercial
- Attribution, No Derivatives
- Attribution, Share Alike
- Attribution
- Identified with URI and Web Page





```
<rdf:RDF xmlns="http://creativecommons.org/ns#"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  <License rdf:about="http://creativecommons.org/licenses/by-nc-sa/3.0/">
    <permits rdf:resource="http://creativecommons.org/ns#Reproduction"/>
    <permits rdf:resource="http://creativecommons.org/ns#Distribution"/>
    <requires rdf:resource="http://creativecommons.org/ns#Notice"/>
    <requires rdf:resource="http://creativecommons.org/ns#Attribution"/>
    <prohibits rdf:resource="http://creativecommons.org/ns#CommercialUse"/>
    <permits rdf:resource="http://creativecommons.org/ns#DerivativeWorks"/>
    <requires rdf:resource="http://creativecommons.org/ns#ShareAlike"/>
  </License>
</rdf:RDF>
```



# Discovery



artist: [Solid E](#)  
 title: [I Left 'Cause You Ain't Right](#)  
[Jazz](#)  
[Jazz Vocals](#)

**JAZZ SPAGHETTINI, zigzag** [as flag](#)  
 Author: m.pompetti

Google **Advanced Search** [Advanced Search](#)

Find results with all of the words  
 with the exact phrase  
 with at least one of the words  
 without the words

Language Return pages written in any language  
 File Format Only return results of the file format any format  
 Date Return web pages updated in the anytime  
 Occurrences Return results where my terms occur anywhere in the page  
 Domain Only return results from the site or domain  
 Usage Rights Return results that are not filtered by license  
 SafeSearch No filtering Filter using [SafeSearch](#) free to use or share, even commercially  
 free to use share or modify  
 free to use, share or modify, even commercially

# ODRL/CC Mapping



CC License	Permission	Constraint	Requirement
<b>Attribution</b>	Reproduction Distribution Derivative Works		Notice Attribution
<b>Attri-NoDerivs</b>	Reproduction Distribution		Notice Attribution
<b>Attr-NonComm-NoDerivs</b>	Reproduction Distribution	Non Commercial Use	Notice Attribution
<b>Attr-NonComm</b>	Reproduction Distribution Derivative Works	Non Commercial Use	Notice Attribution
<b>Attr-NonComm-Share</b>	Reproduction Distribution Derivative Works	Non Commercial Use	Notice Attribution Share-A-Like
<b>Attr-Share</b>	Reproduction Distribution		Notice Attribution Share-A-Like

# Example



```
<o-ex:permission>
  <cc:Reproduction/>
  <cc:Distribution/>
  <cc:DerivativeWorks/>
</o-ex:permission>
<o-ex:constraint>
  <cc:NonCommercialUse/>
</o-ex:constraint>
<o-ex:requirement>
  <o-dd:attribution/>
  <cc:Notice/>
  <cc:ShareAlike/>
</o-ex:requirement>
```

# CC Extensibility?



- **UK Common Information Environment (CIE)** report on the use of Creative Commons in the public and education sectors raised a number of areas where the CC licenses lacked support, including:
  - Geographic restrictions
  - Sector restrictions
  - Third party material (inc limited duration)
  - No endorsement clause
- **BBC Archive - UK only constraint**



# Advanced Example



```
<cc:Distribution>
  <o-ex:constraint>
    <o-dd:spatial>
      <o-ex:context>
        <o-dd:uid> urn:iso3166:DE </o-dd:uid>
      </o-ex:context>
    </o-dd:spatial>
  </o-ex:constraint>
</cc:Distribution>

<o-dd:attribution>
  <o-ex:context>
    <o-dd:remark>
      This work created by Anita Music with lyrics by Mary
      Music and sound by Jacky Music.
    </o-dd:remark>
  </o-ex:context>
</o-dd:attribution>
```

## AEShareNet



- **Instant Licenses for VET sector**
  - **AEShareNet-FfE (Free-for-Education)**
  - **AEShareNet-U (Unlocked Content)**
  - **AEShareNet-S (Share and Return)**
  - **AEShareNet-P (Preserve Integrity)**
- **Mediated Licenses**
  - **AEShareNet-C (Commercial Licence)**
  - **AEShareNet-E (End-user Licence)**
- **Identified by URI and documented**

# Example



<rights>

<description>

<string language="en-AU"> TITLE: AEShareNet-U (Unlocked Content); STATEMENT: This Learning Material may be freely used, copied, adapted and distributed. Limited warranty. Enhancements not attributed to copyright owner.;

URL: <http://www.aesharenet.com.au/U4/>;

SPECIAL\_CONDITIONS: The territory is limited to Australia and New Zealand only.;

COPYRIGHT\_OWNER: XYZ; CONTACT:

copyrightinfo@xyzorganisation.com.au;</string>

</description>

</rights>

# Mediated License



- Licence period (eg 1 month, 2 years, etc)
- Territory (eg Australia only, etc)
- Remuneration fees (fixed or variable)
- Royalty payments
- Reporting period of royalties
- If enhancements (and vetting) are allowed
- If supplementary work (+ vetting) is permitted
- If inclusion in compilation (+vet) is permitted
- Limitations to the purpose of use

# ODRL/AEShareNet



- **New Permissions**
  - Use, UseReproduce
- **Requirements**
  - Notice (from ODRL/CC profile)
  - ReturnEnhancements
  - Vetting
  - Reporting
- **Purpose Identifier**
  - urn:aesharenet.edu:terms:education

# CC/AEShareNet Map



Instant License	Permission	Constraint	Requirement
<b>AES FfE</b>	UseReproduce Duplicate	Purpose (edu)	Notice Attribution
<b>CC Attr- NonComm- NoDerivs</b>	Reproduction Distribution	Non Commercial Use	Notice Attribution

# Case Studies



- ANTA (ODRL/AShareNet Profile)
- Mobile (ODRL/OMA Profile)
- Nikky (ODRL/CC Profile)
- Licensa
  - Hybrid CC and “REL” Service

## Case Study: ANTA



<b>Offer Template Overview</b>	Offer Template Name <input type="text"/>																														
	Offer Template Description <input type="text"/>																														
<b>Permission Groups</b>	<input type="checkbox"/> Usage (display, print, play, execute) <input type="checkbox"/> Adaptation (modify, excerpt, annotate, aggregate) <input type="checkbox"/> Transfer [Republish] (give, sell)																														
<b>Constraints</b>	<div>Apply to Permission Groups:</div> <table><tr><td><input type="checkbox"/> Count</td><td><input type="text" value="1"/></td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr><tr><td><input type="checkbox"/> Territory</td><td><input type="text" value="Australia"/></td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr><tr><td><input type="checkbox"/> Time Range</td><td><input type="text" value="14 Days"/></td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr><tr><td><input type="checkbox"/> Purpose</td><td><input type="text" value="Public Education"/></td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr><tr><td><input type="checkbox"/> Group</td><td>Group ID must be specified at Agreement time</td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr><tr><td><input type="checkbox"/> Contextualise</td><td>Remarks <input type="text"/></td><td><input type="checkbox"/> Usage</td><td><input type="checkbox"/> Adaptation</td><td><input type="checkbox"/> Transfer</td></tr></table>	<input type="checkbox"/> Count	<input type="text" value="1"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer	<input type="checkbox"/> Territory	<input type="text" value="Australia"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer	<input type="checkbox"/> Time Range	<input type="text" value="14 Days"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer	<input type="checkbox"/> Purpose	<input type="text" value="Public Education"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer	<input type="checkbox"/> Group	Group ID must be specified at Agreement time	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer	<input type="checkbox"/> Contextualise	Remarks <input type="text"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer
<input type="checkbox"/> Count	<input type="text" value="1"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<input type="checkbox"/> Territory	<input type="text" value="Australia"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<input type="checkbox"/> Time Range	<input type="text" value="14 Days"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<input type="checkbox"/> Purpose	<input type="text" value="Public Education"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<input type="checkbox"/> Group	Group ID must be specified at Agreement time	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<input type="checkbox"/> Contextualise	Remarks <input type="text"/>	<input type="checkbox"/> Usage	<input type="checkbox"/> Adaptation	<input type="checkbox"/> Transfer																											
<b>Requirements</b>	<table><tr><td><input type="checkbox"/> Accept</td><td>Text to Accept <input type="text"/></td></tr><tr><td><input type="checkbox"/> Attribution</td><td>Remarks <input type="text"/></td></tr><tr><td><input type="checkbox"/> Payment</td><td><input type="text" value="Free"/></td></tr></table>	<input type="checkbox"/> Accept	Text to Accept <input type="text"/>	<input type="checkbox"/> Attribution	Remarks <input type="text"/>	<input type="checkbox"/> Payment	<input type="text" value="Free"/>																								
<input type="checkbox"/> Accept	Text to Accept <input type="text"/>																														
<input type="checkbox"/> Attribution	Remarks <input type="text"/>																														
<input type="checkbox"/> Payment	<input type="text" value="Free"/>																														

Roxxie - Rights Offer

Rights Offer Name: Unlimited Play Export 2008

Usage Options

Usage	Count	Time Period	Date Range
<input checked="" type="checkbox"/> Play	Unlimited	Unlimited	From: 1 Jan 2008 To: 1 Jan 2008

Repeat...

Transfer Options

Usage	Count	System	Date Range
<input checked="" type="checkbox"/> Export	2	OMA DRM	From: 1 Jan 2004 To: <input checked="" type="checkbox"/> 30 Dec 2008

Repeat...

Cancel OK

Roxxie - Rights Holders

The Seekers Royalty Set: Standard - Set 1975

Party	Role	Percentage
Judith Durham	Lyrics	30
Athol Guy	Music	30
Keith Potger	Publisher	30
Bruce Woodley	Agent	10

Roxxie - Distributor Agreement

Content	Rights Option Sets	Royalty Sets	Wholesale Price	Number Licences
<input checked="" type="checkbox"/> Georgy Girl	Unlimited Play Export 2008	Standard - 1975	\$ 0.99	40,000
	Try for 2 days	-----	\$ 0.00	
	Repeat...			
<input checked="" type="checkbox"/> Carnival is Over	Unlimited Play - PC	Standard - 1975	\$ 0.50	25,000
	Unlimited Play - Mobile	Split - 2004	\$ 0.80	25,000
	Try for 2 days	-----	\$ 0.00	
	Repeat...			

Add New Content... Cancel OK

# Nikky Editor



- Support both the Instant and REL model
- Automatically map between them
  - if REL choices = Instant License

The image shows two side-by-side screenshots of the NIKKY License Packager software interface. Both windows have a title bar with the NIKKY logo and "License Packager" text. The left window is in the "Common" tab, showing fields for "Content:", "Rights Holder:", and "End User:" with empty text boxes. Below these are two columns of radio button options for license types, including "Attribution", "Attribution-NoDerivs", "Attribution-NonCommercial-NoDerivs", "Attribution-NonCommercial-ShareAlike", "Music Sharing License", "Sampling", "Sampling Plus", "Noncommercial Sampling", "Developing Nations", "GNU GPL", and "Professional". The right window is in the "Advanced" tab, showing the same input fields but with additional checkboxes for "Permission:" (Reproduction, Distribution, DerivativeWorks, Sharing), "Constraint:" (NonCommercialUse, NonHighIncomeNationUse, Territory, Sector, Time Period), and "Requirement:" (Notice, Attribution, ShareAlike, SourceCode). The "Reproduction" checkbox is checked in the right window.



# Case Study: Licensa



The screenshot displays the Licensa website's license selection interface. It features three overlapping panels. The leftmost panel, titled 'Select the License', shows a list of license options with 'Attribution' selected. The middle panel, titled 'Select the Conditions', presents a list of conditions with 'Yes, but...' selected. The rightmost panel, titled 'License Terms', shows the 'ODRL News page' and a list of terms with 'I'd like to be attributed as the author.' selected. A 'Buy Now' button is visible at the bottom of the rightmost panel.

**Select the License**

Select the license for your work. Common and permitted license to the Creative Commons more about below. If time.

**License:**

- ☒ Attribution
- ☐ Questions
- ☐ GO BACK

**Select the Conditions**

Some sites may wish to obtain revenue from how these sites may

- ☐ No, I do not want my
- ☐ Yes, my site can be
- ☒ Yes, but...

- ☒ I'd like to be attributed as the author.
- ☐ I'd like a link back to my original post.
- ☐ You may only use the title and up to 500 characters of my post.
- ☐ Payment required

Annual Subscription

**License Terms**

ODRL News page

If you wish to use the work commercially  
What is commercial?

- ☒ I'd like to be attributed as the author.
- ☐ I'd like a link back to my original post.
- ☐ You may only use the title and up to 500 characters of my post.
- ☐ Payment required

If you wish to use the work non-commercially  
All Rights Reserved

# Mapping Semantics




- Some challenges in mapping CC licenses
  - missing semantics!
- AEShareNet
  - Instant License “special conditions”
  - Mediated Licenses
    - Use full ODRL REL



# Sampling License



 **Sampling Plus:** People can take and transform pieces of your work for any purpose other than advertising, which is prohibited. Noncommercial copying and distribution (like file-sharing) of the entire work are also allowed. Hence, "plus".

 **Noncommercial Sampling Plus:** People can take and transform pieces of your work for noncommercial purposes only. Noncommercial copying and distribution (like file-sharing) of the entire work are also allowed.

Jurisdiction of your license (more info) [Generic](#)

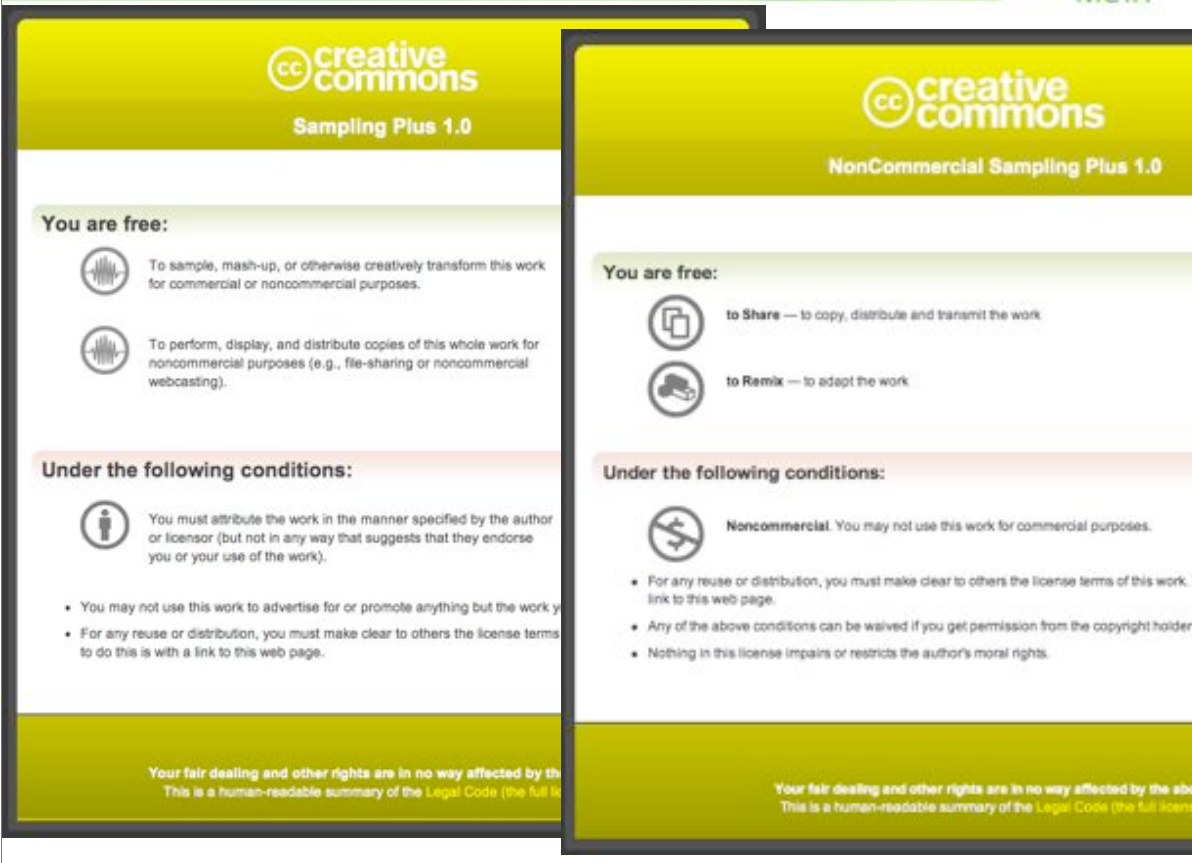
[Click to include more information about your work.](#)

[Get your Sampling License](#)

## ODRL/CC Profile Mapping



CC License Name URI	Permission	Constraint	Requirement
<b>Attribution</b> <a href="http://creativecommons.org/licenses/by/2.0/">http://creativecommons.org/licenses/by/2.0/</a>	<cc:Reproduction> <cc:Distribution> <cc:DerivativeWorks>		<cc:Notice> <cc:dd:attribution>
<b>Attribution-NoDerivs</b> <a href="http://creativecommons.org/licenses/by-nd/2.0/">http://creativecommons.org/licenses/by-nd/2.0/</a>	<cc:Reproduction> <cc:Distribution>		<cc:Notice> <cc:dd:attribution>
<b>Attribution-NonCommercial-NoDerivs</b> <a href="http://creativecommons.org/licenses/by-nc-nd/2.0/">http://creativecommons.org/licenses/by-nc-nd/2.0/</a>	<cc:Reproduction> <cc:Distribution>	<cc:NonCommercialUse>	<cc:Notice> <cc:dd:attribution>
<b>Attribution-NonCommercial</b> <a href="http://creativecommons.org/licenses/by-nc/2.0/">http://creativecommons.org/licenses/by-nc/2.0/</a>	<cc:Reproduction> <cc:Distribution> <cc:DerivativeWorks>	<cc:NonCommercialUse>	<cc:Notice> <cc:dd:attribution>
<b>Attribution-NonCommercial-ShareAlike</b> <a href="http://creativecommons.org/licenses/by-nc-sa/2.0/">http://creativecommons.org/licenses/by-nc-sa/2.0/</a>	<cc:Reproduction> <cc:Distribution> <cc:DerivativeWorks>	<cc:NonCommercialUse>	<cc:Notice> <cc:dd:attribution> <cc:ShareAlike>
<b>Attribution-ShareAlike</b> <a href="http://creativecommons.org/licenses/by-sa/2.0/">http://creativecommons.org/licenses/by-sa/2.0/</a>	<cc:Reproduction> <cc:Distribution>		<cc:Notice> <cc:dd:attribution> <cc:ShareAlike>
<b>Music Sharing License</b> <a href="http://creativecommons.org/licenses/by-nc-nd/2.0/deed-music">http://creativecommons.org/licenses/by-nc-nd/2.0/deed-music</a>	<cc:Reproduction> <cc:Distribution>	<cc:NonCommercialUse>	<cc:Notice> <cc:dd:attribution>
<b>Sampling</b> <a href="http://creativecommons.org/licenses/sampling/1.0/">http://creativecommons.org/licenses/sampling/1.0/</a>	<cc:Reproduction> <cc:DerivativeWorks>		<cc:Notice> <cc:dd:attribution>
<b>Sampling Plus</b> <a href="http://creativecommons.org/licenses/sampling+/1.0/">http://creativecommons.org/licenses/sampling+/1.0/</a>	<cc:Reproduction> <cc:Sharing> <cc:DerivativeWorks>		<cc:Notice> <cc:dd:attribution>
<b>Noncommercial Sampling Plus</b> <a href="http://creativecommons.org/licenses/nc-sampling+/1.0/">http://creativecommons.org/licenses/nc-sampling+/1.0/</a>	<cc:Reproduction> <cc:Distribution> <cc:DerivativeWorks>	<cc:NonCommercialUse>	<cc:Notice> <cc:dd:attribution>



# Summary

- **Instant License regimes need more semantic clarity and extensibility for community reqs**
- **Solution is to adopt existing REL(s)**
  - **Based on formal IPR model and requirements**
  - **Proved and deployed in numerous sectors**
- **License Management challenged in the Open Environment**
  - **Tools can be built**
  - **Trust the user community**
- **Awareness of rights is always a good start!**